

ERTIFICATE OF MAILING/FACSIMILE TRANSMISSION (37 CFR 1.8)

y certify that this paper (along with any paper referred to as being transmitted therewith) is being deposited with the United States Postal Service in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box. 1450, Alexandria, Virginia 22313-1450 on the date shown below as EXPRESS MAIL POST OFFICE TO ADDRESSEE, MAILING LABEL NO. EV 540353438 US.

Maria T. Sanchez

(Print Name)

Date: June 17, 2005

(Signature) Sana & Sane

Docket No. 2004US301

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Yu SUI et al.

Art Unit: 1756

Serial No. 10/808,884, filed March 25, 2004 Examiner: To be Assigned

POSITIVE-WORKING PHOTOIMAGEABLE BOTTOM ANTIREFLECTIVE For: COATING

INFORMATION DISCLOSURE STATEMENT WITHIN THREE MONTHS OF FILING OR BEFORE MAILING OF THE FIRST OFFICE ACTION (37 CFR 1.97 (b))

June 17, 2005

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Serial No.: 10/808,884 Filed: March 25, 2004

Dear Sir:

1. IDENTIFICATION OF TIME OF FILING INFORMATION DISCLOSURE STATEMENT

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 CFR 1.97(b).

2. PRELIMINARY STATEMENTS

Applicants submit herewith patents, publications or other information of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 CFR 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

Pursuant to the notice in the Official Gazette notice of 5 August 2003, 1276 O.G. 55, copies of US Patents and/or US Patent Publications are not being enclosed as the present application has a filing date after June 30, 2003.

- COMPLETED FORM PTO-1449 IS ATTACHED.
- 4. IDENTIFICATION OF PRIOR APPLICATION IN WHICH LISTED INFORMATION WAS ALREADY CITED AND FOR WHICH NO COPIES ARE SUBMITTED OR NEED BE SUBMITTED

[]	This application	relies, under	35 U.S.C.	120, o	n the	earlier filing	date of
prior application	on Serial No	filed	d on	·			

5. COPIES OF LISTED INFORMATION ITEMS ACCOMPANYING THIS STATEMENT

US 6,319,651	US 6,251,562
US 4,491,628	US 4,910,122
US 5,350,660	US 5,635,333
US 4,863,827	US 5,882,996
US 5,939,236	US 6,110,653
US 5,886,102	US 6,319,651
US 6,080,530	US 6,054,254

EXPRESS MAIL MAILING LABEL NO. EV 540353438 US

Serial No.: 10/808,884 Filed: March 25, 2004

US 6,114,085	US 5,716,756
US 5,652,297	US 5,069,997
US 5,981,145	US 5,585,219
US 6,187,506	US 2004/0018451 A1
US 5,939,236	EP 794,458 A2
US 5,935,760	GB 2 320 178 A
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US 5,880,169	DE 39 30 087 A1
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US 5,354,643	WO 97/33198

Yamaoka et al., "Photochemical Dissociation of p-Nitrobenzyl Aromatic Sulfonate and Its Application to Chemical Amplification Resists", *Journal of Photopolymer Science and Technology*, Vol. 3, No. 3 (1990), pp. 275 – pp. 280

Schlegel et al., "Studies on the Acid Formation and Deprotection Reaction by Novel Sulfonates in a Chemical Amplification Positive Photoresist", *Journal of Photopolymer & Science Technology*, Vol. 3, No. 3 (1990), pp. 281 – pp.287

Shirai et al., "Photochemistry of Imino Sulfonate Compounds and Their Application to Chemically Amplified Resists", Journal of Photopolymer Science and Technology, Vol. 3, No. 3 (1990), pp. 301 – pp. 304

CRC Handbook of Chemistry & Physics, "Dissociation Constants Of Organic Acids And Bases", CRC Press (1994-1995 75th Edition), pp. 8-45 – pp. 8-55

Moon et al., "Three-Component Photopolymers Based on Thermal Cross-Linking and Acidolytic De-Cross-Linking of Vinyl Ether Groups. Effects of Binder Polymers on Photopolymer Characteristics, *Chemical Materials*, Vol. 6 (1994), pp. 1854 – pp. 1860

Abstract of Houlihan et al., "Chemically amplified resists. The chemistry and lithographic characteristics of nitrobenzyl benzenesulfonate derivatives", *Journal of Photopolymer & Science Technology*, Vol. 3, pp. 259 – pp. 273 (1990)

Abstract of Yamaoka et al., "Reactions of vinyl ethers and application to photoreactive process", *Trends in Photochemistry & Photobiology*, Vol. 7, pp. 45 – pp. 70 (2001)

Abstract of Schacht et al., "Acid labile crosslinked units: a concept for improved positive deep-UV photoresists", ACS Symposium Series, 706, pp. 78 – pp. 94 (1998)

Serial No.: 10/808,884 Filed: March 25, 2004

Legible copies of all items listed accompany this information statement except as noted herein.

[] Items in prior application from which an earlier filing date is claimed for this application as identified in No. 4 above.

6. TRANSLATION(S) OF NON-ENGLISH LANGUAGE DOCUMENTS

[] Submitted herewith is an English language abstract of the following foreign language patents, publications or information or of those portions of those patents, publications or information considered to be material:

[] No English language translations of the foreign language patents, publications or information or parts thereof are readily available, except those listed above.

[] The following foreign language documents submitted are believed to be the equivalent or substantial equivalent of the English language documents identified below, which are also submitted herewith:

Pursuant to the Official Gazette notice of 5 August 2003, 1276 O.G. 55, since this application entered the National Stage under 35 USC 371 after June 30, 2003, applicant is not enclosing copies of the above mentioned U.S. patents and/or U.S. patent publications.

8. IDENTIFICATION OF PERSON(S) MAKING THIS INFORMATION DISCLOSURE STATEMENT

The person making this statement is the attorney who signs below on the basis of the information in the attorney's file.

Respectfully submitted:

Attorney for Applicant(s)

Sangya Jain

(Reg. No. 38, 504) 70 Meister Avenue

Somerville, New Jersey 08876 Telephone: (908) 429-3536 Telefax: (908) 429-3650

Customer No. 26,289

INFORMATION DISCLOSURE CITATION				2004US30: APPLICANT(S)	10/808.884			
·	(Use several sheets if necess	spiny))05 J	Yu SUI et al. FILING DATE March 25, 20	i i	GROUP ART UN	NIT 1756	
		U.	S. POTEN	T DOCUMENTS		-	<u></u>	
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	Yamaoka et al., "Phot Amplification Resists"	ochemical Dissoc', Journal of Pho	iation of p topolymer	p-Nitrobenzyl Aromatic S Science and Technology,	ulfonate and It Vol. 3, No. 3 (1	s Application to 1990), pp. 275 -	o Chemical pp. 280	,
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Form PTO-A820 (also form PTO-1449)

ATTY DOCKET NO. APPLICATION NO. 2004US301 10/808,884 INFORMATION DISCLOSURE CITATION Yu SUI et al. (Use several sheets if necessary) FILING **GROUP ART** March 25, 2004 1756 **U.S. PATENT DOCUMENTS** *EXAMINER FILING DATE CLASS SUBCLASS DOCUMENT NUMBER DATE NAME INITIAL IF APPROPRIATE 5,886,102 03/23/1999 Sinta et al. 08/29/2000 6,110,653 Holmes et al. 06/27/2000 6,080,530 Shao et al. 06/26/2001 Breyta et al. 6,251,562 B1 4,910,122 3/20/1990 Arnold et al. **U.S. PATENT APPLICATION PUBLICATIONS** *EXAMINER FILING DATE DATE CLASS SUBCLASS DOCUMENT NUMBER NAME IF APPROPRIATE INITIAL **FOREIGN PATENT DOCUMENTS** TRANSLATION COUNTRY CLASS SUBCLASS DOCUMENT NUMBER DATE YE\$ NO WO 97/33198 09/12/1997 **WIPO** OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Shirai et al., "Photochemistry of Imino Sulfonate Compounds and Their Application to Chemically Amplified Resists", *Journal of Photopolymer Science and Technology*, Vol. 3, No. 3 (1990), pp. 301 - pp. 304

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DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

CRC Handbook of Chemistry & Physics, "Dissociation Constants Of Organic Acids And Bases", CRC Press (1994-1995 75th Edition), pp. 8-45 - pp. 8-55

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	OTHER DOCUM	L ENTS (Includin	L ng Authoi	r, Title, Date, Pertiner	l nt Pages, Etc.)			
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Abstract of Houlihan et al., "Chemically amplified resists. The chemistry and lithographic characteristics of nitrobenzyl benzenesulfonate derivatives", Journal of Photopolymer & Science Technology, Vol. 3, pp. 259 - pp. 273 (1990)

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ATTY DOCKET NO. APPLICATION NO. 2004US301 10/808,884 INFORMATION DISCLOSURE CITATION Yu SUI et al. (Use several sheets if necessary) **GROUP ART** FILING March 25, 2004 1756 **U.S. PATENT DOCUMENTS**

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Abstract of Yamaok & Photobiology, Vol	a et al., "Reactions . 7, pp. 45 - pp. 70	s of vinyl ethers and application to (2001)	photoreactive pr	ocess", Trend	ls in Photochem	istry
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	5,652,297 5,981,145 6,187,506 B1 5,939,236 DOCUMENT NUMBER DOCUMENT NUMBER OTHER DOCUM	DOCUMENT NUMBER DATE	S,652,297 07/29/1997 McCulloch et al.	DOCUMENT NUMBER DATE NAME CLASS	DOCUMENT NUMBER DATE NAME CLASS SUBCLASS	DOCUMENT NUMBER DATE NAME CLASS SUBCLASS FILING DATE #APPROPRIATE 5,652,297 07/29/1997 McCulloch et al. 5,981,145 11/09/1999 Ding et al. 5,939,236 08/17/1999 Pavelchek et al. 5,939,236 08/17/1999 Shao et al. U.S. PATENT APPLICATION PUBLICATIONS DOCUMENT NUMBER DATE NAME CLASS SUBCLASS FILING DATE #APPROPRIATE FOREIGN PATENT DOCUMENTS DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS TRANSLATIC YES OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) A Photobiology, Vol. 7, Da. 45 S. Do. 70 (2001) A Photobiology, Vol. 7, Da. 45 S. Do. 70 (2001)

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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